Survey of

Motor Vehicle and Mobile Equipment Refinishing Coatings Containing Hexavalent Chromium or Cadmium (and their Alternatives)

2001

SURVEY FORM INSTRUCTIONS

California Environmental Protection Agency

Air Resources Board

SURVEY INSTRUCTION CONTENTS

	<u>Page</u>
Introduction	2
Instructions for Completing Survey Forms	3 - 12
Definitions	13 - 15
Calculations	16
U.S. Resident Population	17
SIC Codes	18
Example of Completed Survey	19 - 23

QUESTIONS

If you have any questions or other requests please call:

Jose Gomez or write California Air Resources Board

tel 916.324.8033 P.O. Box 2815

jgomez@arb.ca.gov Sacramento, CA 95812

ATTN: SSD/Measures Assessment Branch

Christopher Gallenstein Motor Vehicle Coatings Survey

tel 916.324.8017 tel 916.324.8022 cgallens@arb.ca.gov Fax 916.324.8026

INSTRUCTIONS FOR RETURNING FORMS

Forms should be completed as instructed in each individual form. Please make sure that the General Information Form, a signed and dated Form I, and all applicable forms are completed and returned. Please return all completed forms to:

California Air Resources Board

P.O. Box 2815

Sacramento, CA 95812

ATTN: SSD/Measures Assessment Branch

Motor Vehicle Coatings Survey

ELECTRONIC SUBMITTAL OPTIONS

The survey forms are also available in a Microsoft Access database format. If you prefer to complete and/or return the forms electronically, details can be obtained by contacting either Jose Gomez at (916) 324-8033 or Christopher Gallenstein at (916) 324-8017.

Additional survey packages can also be downloaded from: www.arb.ca.gov/coatings/autorefin/2000survey.htm

INTRODUCTION

Thank you for participating in this survey of motor vehicle and mobile equipment coatings!

The survey asks you to complete six forms:

- 1. General Information Form
- 2. FORM I: Company Information
- 3. FORM II: Product Information for Coatings Containing Hexavalent Chromium and/or Cadmium
- 4. FORM III: Product Information for Alternatives to Coatings Containing Hexavalent Chromium and/or Cadmium
- 5. FORM IV: Ingredient Information for Coatings Containing Hexavalent Chromium and/or Cadmium
- 6. FORM V: Ingredient Information for Alternatives to Coatings Containing Hexavalent Chromium and/or Cadmium

How will this survey information be used? Our existing inventory of toxic air emissions from motor vehicle and mobile equipment coatings is based on limited data supplied to ARB through the AB2588 "Hot Spots" program and other limited data that were collected between 1988 and 1996. Inventory information is necessary for planning and modeling to forecast the effects of new regulatory efforts. Accurate inventory information produces better results, and also assures that businesses are properly credited for successful reductions in emissions. Finally, the ingredient information requested will be used to study the ingredients of the coatings that contain hexavalent chromium and/or cadmium and the coating ingredients of the coatings that are replacing hexavalent chromium and/or cadmium.

We have tried to make this survey as simple as possible. We worked with several air pollution control districts as well as the National Paint and Coatings Association on the content of the survey. However, you may have questions as you complete the survey. Do not hesitate to call us and we will answer your questions as quickly as possible.

If you wish to designate any information contained in your survey data as CONFIDENTIAL INFORMATION, please read and complete the confidential information submittal form included in the survey forms package.

Thank you again, in advance, for your time and participation in this survey.

INSTRUCTIONS FOR COMPLETING THE GENERAL INFORMATION FORM AND SURVEY FORM I

Please complete the General Information Form (self-explanatory) and include this form with all survey responses.

The following instructions apply to FORM I - Company Information. General company information such as name and address are needed, as well as information regarding the company size and business type. This information will assist in characterizing the types of businesses that are included in the survey as required by state law.

Company Name: Please enter the name of the company also known as responsible party.

Division Name: If the respondent to the survey is representing a division of the company, please enter the name of the division.

Address: Enter the mail address of the company or division responsible for completing the survey.

Contact Name: Name of the person to be contacted if there are questions about the survey responses.

Title: Business title of the contact person.

Telephone: Telephone number for the contact person.

Fax: Fax number of the contact person.

E-mail: E-mail address of the contact person.

Responsible Party: Check the appropriate box (Yes or No) to indicate if your company is the responsible party (see definition below) for any motor vehicle and mobile equipment coatings that were sold in California.

"Responsible party" means the company, firm or establishment which is listed on the products' label. If the label lists two companies, firms or establishments, the responsible party is the party which the product was "manufactured for" or "distributed by," as noted on the label.

Note: If you are not the responsible party, please stop here and complete the "Certification" section of Form I. Return Form I and the General Information Form to the California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812 ATTN: SSD/Measures Assessment Branch Motor Vehicle Coatings Survey.

Type of Business: Check the box(s) that describes the primary type of business conducted by your company or division.

Company Marketing Classification: Check the box that describes your company's primary marketing classification.

Independent Ownership: Check the appropriate answer box (Yes or No) to indicate if the company is independently owned. If the company is not independently owned, enter the name and address of the parent company in the spaces provided.

Standard Industrial Classification (SIC) codes: Enter your company's primary SIC codes (see page 18).

Gross Annual Receipts: Check the box which identifies the gross annual receipts generated by the company or division.

California - Gross Annual Receipts: Check the box which identifies the gross annual receipts generated by the company or division in California.

Employees: Check the box which identifies the number of employees (including part-time and temporary staff) of the company or division.

California Employees: Check the box which identifies the number of employees (including part-time and temporary staff) of the company or division in California.

Certification: Please have a designated contact person certify the accuracy of the completed General Information Form, Company Information (FORM I), Product Information (FORM II & III), and the Ingredient Information (FORM IV and FORM V).

INSTRUCTIONS FOR COMPLETING SURVEY FORM II

This form requests specific information on each product or grouping of products. As explained below, products may be grouped under certain conditions. Only complete FORM II Product Information if you are the *responsible party* for a product sold in California during the calendar year 2000.

Entry #: Enter a number (1, 2, ...) for each entry on FORM II. This number will be used to relate products listed in this table to the ingredient information table in Form IV and to alternative products on Form III.

Product Name: Enter the product name and product number as printed on the label. Example: XYZ 23-66 Chromated Etch Primer

Coating Code: Enter the code from the list below which best represents the reported coatings' category

<u>Code</u>	Coating
1	Metal Etch Primer
2	Epoxy Primer
3	Primer Sealer
4	Sealer
5	tint/toner
6	Package Color
7	Other (Specify)

Percent Hexavalent Chromium (wt. %): Enter the weight percent of hexavalent chromium in the coating. Do not include the weight of the container. Weight shall be expressed to 0.01 percent or less if known (Example 0.23% or 0.234%).

Percent Cadmium (wt. %): Enter the weight percent of cadmium in the coating. Do not include the weight of the container. Weight shall be expressed to 0.01 percent or less if known (Example 1.23% or 1.234%).

VOC Regulatory: Enter the VOC content of the coatings(s), as supplied, in grams of VOC per liter of coating, less water and less exempt compounds. This may be determined from the chemical composition data or previously determined by EPA Method 24, 40 CFR Part 60, as amended in Federal Register Vol. 57, No. 133, July 10, 1992, or ASTM D 3960-92. (See calculations on page 16) Do not perform additional analysis for purposes of completing this survey.

Coating Density: Enter the mass per unit volume of the coating (lbs/gallon).

2000 California Sales in Gallons: Enter the California sales of the coating, in <u>gallons</u>, for the calendar year 2000. If California specific sales data are not available, sales may be estimated using national or regional sales figures that are apportioned appropriately. If you use population as a basis for determining sales, please use the U.S. Resident Population estimates provided on page 17 of these survey instructions.

Percent of Total California Sales in Gallons of Product Type: Enter the percent of California sales of the coating category that the product represents. Example: XYZ 23-66 Chromated Etch Primer represents 60 percent of the total quantity of etch primers sold by your company in California for calendar year 2000.

Price per Gallon: Enter the wholesale price per gallon. If price varies, enter the average wholesale price per gallon.

Recommended Thinning: If the manufacturer recommends adding catalyst, activators, reducers, etc., please indicate the appropriate mix ratios of the additional materials.

Comments: If you have any comments, including VOC, hiding ability, or corrosion resistance of the coating, that will help clarify entries made for FORM II, enter these comments in this section or attach additional comments and state that additional comments are attached. Note: please supply data to substantiate any claims made in the comment section.

INSTRUCTIONS FOR COMPLETING SURVEY FORM III Product Information for Alternatives to Coatings Containing Hexavalent Chromium and/or Cadmium

FORM III requests information about coating alternatives to a hexavalent chromium and/or cadmium-containing coatings listed on Form II.

Entry #: Enter a number (1, 2, ...) for each entry on FORM III. This number will be used to relate products listed in this table to the ingredient information table in Form V.

Alternative to Form II Entry #: Enter the corresponding entry # from Form II.

Product Name: Enter the product name as printed on the label and include product number. Example: XYZ 22-65 Non-Chromated Etch Primer

Coating Code: Enter the code from the list below which best represents the reported coatings' category

<u>Code</u>	<u>Coating</u>
1	Metal Etch Primer
2	Epoxy Primer
3	Primer Sealer
4	Sealer
5	tint/toner
6	Package Color
7	Other (Specify)

VOC Regulatory: Enter the VOC content of the coatings(s), as supplied, in grams of VOC per liter of coating, less water, and less exempt compounds. This may be determined from the chemical composition data or previously determined by EPA Method 24, 40 CFR Part 60, as amended in Federal Register Vol. 57, No. 133, July 10, 1992, or ASTM D 3960-92. (See calculations on page 16) Do not perform additional analysis for purposes of completing this survey.

Coating Density: Enter the mass per unit volume of the coating (lbs/gallon).

2000 California Sales in Gallons: Enter the California sales of the coating, in <u>gallons</u>, for the calendar year 2000. If California specific sales data are not available, sales may be estimated using national or regional sales figures that are apportioned appropriately. If you use population as a basis for determining sales, please use the U.S. Resident Population estimates provided on page 17 of this survey.

Percent of Total California Sales in Gallons of Product Type: Enter the percent of California sales of the coating category, that the product represents. Example XYZ 23-65 Non-Chromated Etch Primer represents 40 percent of the total quantity of etch primers sold by XYZ company in California.

Price per Gallon: Enter the wholesale price per gallon. If price varies, enter the average wholesale price per gallon.

Recommended Thinning: If the manufacturer recommends adding catalyst, activators, reducers, etc., please indicate the appropriate mix ratios and diluent type of the additional materials.

Comments: If you have any comments, including the VOC, hiding ability or corrosion resistance of the coating that will help clarify entries made for FORM III, enter these comments in this section or attach additional comments and state that additional comments are attached. Note: please supply data to substantiate any claims made in the comment section.

INSTRUCTIONS FOR COMPLETING SURVEY FORM IV Ingredient Information Table

FORM IV requests ingredient information about products that were included in Form II. Identify the percent of hexavalent chromium and/or cadmium to 0.01% or less if known. Any VOCs less than 1.0 percent by weight should be aggregated and entered as a single weight percent value. Any Exempt Compounds less than 1.0 percent by weight should be aggregated and entered as a single weight percent value. Any remaining ingredients should be included in "All Other" for a total of all ingredients equaling 100 percent by weight of the product.

Entry # From FORM II: Enter the Entry # from FORM II to which this ingredient list applies.

Ingredient #: Provide a numeric value (sequential) for each ingredient.

Ingredient Name: Enter the chemical name of the ingredient. Chemical names must be distinguished from trade names. For example, the chemical name of SD 40 Alcohol is ethanol. Enter the trade name of the ingredient if the chemical name is unknown.

CAS#: Please enter the Chemical Abstract Service (CAS) number for the ingredient.

Weight % (of total material): Enter the percent by weight of each ingredient in the final product. If the ingredient is a mixture of known components, list the components separately with their individual weight percentages in the final product. If the components of a mixture cannot be determined, list the ingredient as a single entity.

Reporting Level - List ingredients that contain hexavalent chromium or cadmium that individually amount to 0.01% or greater by weight of the final product. List all other ingredients that individually amount to 1.0% or greater by weight of the final product.

VOCs: Enter the name, CAS #, and percent by weight of each VOC in the final product.

Exempt Compounds (Exempt VOCs): Enter the name, CAS #, and percent by weight of each Exempt VOC in the final product. See pages 13 and 14 for a list of exempt compounds.

Aggregated VOCs < 1.0%: Aggregate each of the remaining VOCs that individually account for less than 1.0% of the final product and enter the weight percent.

Aggregated Exempt Compounds < 1.0%: Aggregate each of the remaining Exempt Compounds that individually account for < 1.0% of the final product and enter the weight percent.

ALL Other (Remaining Ingredients): Enter remaining ingredients.

Total of All Ingredients: The sum of all ingredients in the table must equal 100 percent by weight. If this value does not sum to 100, please check the component percentages. For example:

Ingredient Groups	Wt%
Sum of Hexavalent Chromium Sum of Cadmium Sum of VOCs Sum of Exempt Compounds Aggregated VOCs < 1.0% Aggregated Exempt Compounds < 1.0% Water All Other	2.582 3.718 63.4 8.2 2.1 1.5 2.1 16.4
Total of All Ingredients	100%

Comments: Enter any information that will help clarify entries made for FORM IV.

INSTRUCTIONS FOR COMPLETING SURVEY FORM V Ingredient Information Table

FORM V requests ingredient information about products that were included in Form III. Identify the percent of alternative ingredient to hexavalent chromium and/or cadmium to 0.1% or less if known. Any VOCs less than 1.0 percent by weight should be aggregated and entered as a single weight percent value. Any Exempt Compounds less than 1.0 percent by weight should be aggregated and entered as a single weight percent value. Identify the alternatives and include them to the tenth of a percent (0.1%). Any remaining ingredients should be included in "All Other" for a total of all ingredients equaling 100 percent by weight of the product.

Entry # From FORM III: Enter the Entry # from FORM III to which this ingredient list applies.

Ingredient #: Provide a numeric value (sequential) for each ingredient.

Ingredient Name: Enter the chemical name of the ingredient. Chemical names must be distinguished from trade names. For example, the chemical name of SD 40 Alcohol is ethanol. Enter the trade name of the ingredient if the chemical name is unknown.

CAS#: Please enter the Chemical Abstract Service (CAS) number for the ingredient.

Weight % (of total material): Enter the percent by weight of each ingredient in the final product. If the ingredient is a mixture of known components, list the components separately with their individual weight percentages in the final product. If the components of a mixture cannot be determined, list the ingredient as a single entity.

Reporting Level - List ingredients that are alternatives to hexavalent chromium or cadmium that individually amount to 0.1% or greater by weight of the final product. List all other ingredients that individually amount to 1.0% or greater by weight of the final product.

VOCs: Enter the name, CAS #, and percent by weight of each VOC in the final product.

Exempt Compounds (Exempt VOCs): Enter the name, CAS #, and percent by weight of each Exempt VOC in the final product. See pages 13 and 14 for a list of exempt compounds.

Aggregated VOCs < 1.0%: Aggregate each of the remaining VOCs that individually account for less than 1.0% of the final product and enter the weight percent.

Aggregated Exempt Compounds < 1.0%: Aggregate each of the remaining Exempt Compounds that individually account for < 1.0% of the final product and enter the weight percent.

ALL Other (Remaining Ingredients): Enter remaining non-volatile ingredients.

Total of All Ingredients: The sum of all ingredients in the table must equal 100 percent by weight. If this value does not sum to 100, please check the component percentages. For example:

Ingredient Groups	<u>Wt%</u>
Sum of Alternatives to Hexavalent Chromium Sum of VOCs Sum of Exempt Compounds Aggregated VOCs < 1.0% Aggregated Exempt Compounds < 1.0% Water All Other	6.3 63.4 8.2 2.1 1.5 2.1 16.4
Total of All Ingredients	100%

Comments: Enter any information that will help clarify entries made for FORM V.

DEFINITIONS

Alternative Ingredients: Ingredients that are substituting for either hexavalent chromium or cadmium containing ingredients.

Catalyst: A substance that enables a chemical reaction to proceed at a faster rate or under different conditions than otherwise possible.

Coating: A liquid, liquefiable or mastic composition which is converted to a solid protective, decorative or functional adherent film after application as a thin layer.

Density: Mass per unit volume.

Exempt Compounds: means any of the following organic compounds (compounds with negligible photochemical reactivity):

methane;	[74-82-8]*
methylene chloride (dichloromethane);	[75-09-2]
1,1,1-trichloroethane (methyl chloroform);	[71-55-6]
trichlorofluoromethane (CFC-11);	[75-69-4]
dichlorodifluoromethane (CFC-12);	[75-43-4]
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);	[76-13-1]
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);	[76-14-2]
chloropentafluoroethane (CFC-115);	[76-15-3]
chlorodifluoromethane (HCFC-22);	[75-45-6]
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);	[306-83-2]
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);	[2837-89-0]
1,1-dichloro-1-fluoroethane (HCFC-141b);	[1717-00-6]
1-chloro-1,1-difluoroethane (HCFC-142b);	[75-68-3]
trifluoromethane (HFC-23);	[75-46-7]
pentafluoroethane (HFC-125);	[354-33-6]
1,1,2,2-tetrafluoroethane (HFC-134);	[359-35-3]
1,1,1,2-tetrafluoroethane (HFC-134a);	[811-97-2]
1,1,1-trifluoroethane (HFC-143a);	[420-46-2]
1,1-difluoroethane (HFC-152a);	[75-37-6]
cyclic, branched, or linear completely methylated siloxanes;	[various]
the following classes of perfluorocarbons:	[various]

- (A) cyclic, branched, or linear, completely fluorinated alkanes;
- (B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (D) sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds only to carbon and fluorine; and the following low-reactive organic compounds which have been exempted by the U.S. EPA:

acetone;	[67-64-1]
ethane;	[74-84-0]
methyl acetate	[79-20-9]
[perchloroethylene]**; and	[127-18-4]
parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene).	[98-56-6]

^{*} NOTE: Chemical Abstract Service (CAS) identification numbers have been included in brackets []

for convenience.

** The Air Resources Board exempted Perchloroethylene from the definition of VOC in the Consumer Products regulations in November 1996. Perchloroethylene is under evaluation for other inventory categories.

Highway: A way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Highway includes street.

Importer: A company, group, or individual that brings motor vehicle or mobile equipment coatings from a location outside the United States into the United States for sale or distribution within the United States.

Label: Any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any motor vehicle or mobile equipment coating container for purposes of branding, identifying, or giving information with respect to the product, use of the product, or contents of the container.

Manufacturer: A company, group, or individual that produces, packages, or repackages motor vehicle and/or mobile equipment coatings for sale or distribution in the United States.

Metallic/Iridescent Topcoats: Any topcoat which contains more than 0.042 pounds of iridescent particles, composed of metal as metallic particles or silicon as mica particles, as applied, where such particles are visible in the dried film.

Mobile Equipment: Any equipment, other than vehicles (as defined below), which may be drawn or is capable of being drawn on a roadway, including, but not limited to truck trailers, camper shells, mobile cranes, bulldozers, concrete mixers, street cleaners, golf carts, all terrain vehicles, implements of husbandry, and hauling equipment used inside and around airports, docks, depots and industrial and commercial plants.

Multi-Color Coating: Coatings which exhibit more than one color when applied and which are packaged in a single container and applied in a single coat.

Pre-treatment Wash Primers: Coatings which contain a minimum of 0.5% acid by weight, applied directly to bare metal surfaces to provide necessary surface etching.

Primers: Any coating applied prior to the application of a topcoat for the purpose of corrosion resistance and adhesion of the topcoat.

Primer Sealer: Any coating applied for the purpose of sealing the underlying metal or coating system prior to the application of a topcoat.

Primer Surfacer: Any coating applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat and which promotes a uniform surface by filling in surface imperfections.

Reducer: the solvent used to thin enamel.

Refinishing: Any coating of vehicles, their parts or components, or mobile equipment, including partial body collision repair, for the purpose of protection or beautification and which is

subsequent to the original coating applied at the Original Equipment Manufacturing (OEM) plant coating assembly line.

Responsible Party: The company, firm or establishment which is listed on the product's label. If the label lists two companies, firms or establishments, the responsible party is the party which the product was "manufactured for" or "distributed by," as noted on the label.

SIC (Standard Industrial Classification) Code: A United States Department of Commerce system that organizes all industry types in the United States. Each business establishment is classified according to its primary activity, signified by a four digit SIC code (See page 18).

Topcoat: Any coating applied over a primer, primer system, or an original OEM finish for the purpose of protection or appearance.

Vehicle: A device by which any person or property may be propelled, moved, or drawn upon a Highway, excepting a device moved exclusively by human power or used exclusively upon stationary rails or tracks.

Volatile Organic Compound (VOC): Any compound of carbon, excluding carbonates (carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate), and exempt compounds.

VOC Regulatory: The VOC content of the coatings(s), as supplied, in grams of VOC per liter of coating, <u>less water</u>, and <u>less exempt compounds</u>. This may be determined from the chemical composition data or previously determined by EPA Method 24, 40 CFR Part 60, as amended in Federal Register Vol. 57, No. 133, July 10, 1992, or ASTM D 3960-92. See calculations on page 16.

CALCULATIONS

VOC Content Calculations

The following equations can be used to calculate entries contained in Forms II and III of this survey.

$$VOC_{Regulatory} = \frac{W_{vm} - W_{w} - W_{e}}{V_{c} - V_{w} - V_{e}}$$

Where:

W_{vm} = Total weight of volatile materials (VOC+water+exempt compounds) in the coating, in grams
 W_w = Weight of water in the coating, in grams
 W_e = Weight of exempt compounds in the coating, in grams
 V_c = Total volume of the coating, in liters
 V_w = Volume of water in the coating, in liters

Volume of exempt compounds in the coating, in liters

Conversion Factors

VOC Regulatory (weight per volume): one pound VOC per gallon (US) = 119.82 grams VOC per liter

Units of Volume:

 V_{e}

1 fl oz = 0.029574 liters

1 liquid pint = 0.47318 liters

1 liquid quart = 2 liquid pints = 0.94635 liters

1 gallon = 4 liquid quarts = 3.7854 liters

Units of Mass:

Unit	ounce(oz)	pound(lb)	gram(g)	kilogram(kg)
1 oz =	1	0.0625	28.3495	0.02834
1 lb =	16	1	453.592	0.45359

UNITED STATES RESIDENT POPULATION* April 1, 2000

Area	Population as	State Rank as of	Area	Population as	State Rank as of
	of			of April 1, 2000	
	April 1, 2000	April 1, 2000			April 1, 2000
Alabama	4,447,100	23	Nebraska	1,711,263	38
Alaska	626,932	48	Nevada	1,998,257	35
Arizona	5,130,632	20	New Hampshire	1,235,786	41
Arkansas	2,673,400	33	New Jersey	8,414,350	9
California	33,871,648	1	New Mexico	1,819,046	36
Colorado	4,301,261	24	New York	18,976,457	3
Connecticut	3,405,565	29	North Carolina	8,049,313	11
Delaware	783,600	45	North Dakota	642,200	47
District of Columbia	572,059	(NA)	Ohio	11,353,140	7
Florida	15,982,378	4	Oklahoma	3,450,654	27
Georgia	8,186,453	10	Oregon	3,421,399	28
Hawaii	1,211,537	42	Pennsylvania	12,281,054	6
Idaho	1,293,953	39	Rhode Island	1,048,319	43
Illinois	12,419,293	5	South Carolina	4,012,012	26
Indiana	6,080,485	14	South Dakota	754,844	46
Iowa	2,926,324	30	Tennessee	5,689,283	16
Kansas	2,688,418	32	Texas	20,851,820	2
Kentucky	4,041,769	25	Utah	2,233,169	34
Louisiana	4,468,976	22	Vermont	608,827	49
Maine	1,274,923	40	Virginia	7,078,515	12
Maryland	5,296,486	19	Washington	5,894,121	15
Massachusetts	6,349,097	13	West Virginia	1,808,344	37
Michigan	9,938,444	8	Wisconsin	5,363,675	18
Minnesota	4,919,479	21	Wyoming	493,782	50
Mississippi	2,844,658	31			
Missouri	5,595,211	17			
Montana	902,195	44			
			TOTAL RESIDENT POPULATION	281,421,906	(NA)

^{*} From U.S. Census Bureau, 2000 Census (http://www.census.gov/population/cen2000/tab04.pdf)

SIC CODES

The SIC codes below represent only portions of Manufacturing, Wholesale Trade and Retail Trade*. The list is by no means all inclusive, but represents a useful reference if your company SIC code is not known. A full listing is available from the ARB upon request. Complete listings and detailed descriptions are also available via the internet at http://www.census.gov/epcd/naics/NSIC3B.HTM#S28

CHEMICALS AND ALLIED PRODUCTS

2810 -- Industrial Inorganic Chemicals

2812 -- Alkalies and chlorine

2813 -- Industrial gases

2816 -- Inorganic pigments

2819 -- Industrial inorganic chemicals, not elsewhere classified

2820 -- Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic, etc.

2821 -- Plastics materials and resins

2822 -- Synthetic rubber

2823 -- Cellulosic manmade fibers

2824 -- Organic fibers, noncellulosic

2843 -- Surface active agents

2850 -- Paints, Varnishes, Lacquers, Enamels, and Allied Products

2851 -- Paints and allied products

2860 -- Industrial Organic Chemicals

2861 -- Gum and wood chemicals

2865 -- Cyclic crudes and intermediates

2869 -- Industrial organic chemicals, not elsewhere classified

2890 -- Miscellaneous Chemical Products

2891 -- Adhesives and sealants

2895 -- Carbon black

2899 -- Chemical preparations, not elsewhere classified

*From U.S. Census Bureau

WHOLESALE TRADE

5085 -- Industrial Supplies

5160 -- Chemicals and Allied Products

5169 -- Chemicals & allied products, not elsewhere classified

5198 -- Paint products wholesale

RETAIL

5211 -- Lumber & bldg mtls retail

5231 -- Paint, glass, and wallpaper stores

5251 -- Hardware stores

FORM I

Company Information

Company / Division Name: XYZ Company					
Address: 1111 South Windham Road, Lansing, MI, 22222					
Contact Person: John Doe Title: Manager, Product Compliance					
Telephone: (999) 999-9999	Fax:: (999) 999-9998 /e-mail:jdoe@XYZ.com				
RESPONSIBLE PARTY (/ check appropriate box) U YES 9 NO	If you answered "NO" to Responsible Party please stop here and submit FORM I to CARB.				
TYPE OF BUSINESS (check all that apply) U Manufacturer G Importer G Retailer G Private label contract packager G Custom contract packager COMPANY MARKETING CLASSIFICATION G International U National G California Statewide G California Regional If so, which parts:	SIC CODES (Enter primary SIC codes) 8215 COMPANY - GROSS ANNUAL RECEIPTS G Less than \$500,000 G \$500,000 up to \$1 million G \$1 million up to \$2 million G \$2 million up to \$5 million G \$5 million up to \$10 million U \$10 million up to \$100 million G \$100 million up to \$1 billion G \$1 billion or more				
INDEPENDENT OWNERSHIP Is your company independently owned? U YES 9 NO If No, please provide parent company information below. Parent Company Name: Parent Company Address:	CALIFORNIA - GROSS ANNUAL RECEIPTS G Less than \$500,000 G \$500,000 up to \$1 million G \$1 million up to \$2 million G \$2 million up to \$5 million G \$5 million up to \$10 million U \$10 million up to \$100 million G \$100 million up to \$1 billion G \$1 billion or more EMPLOYEES G 10 or less U 11 to 100 G 101 to 250 G 251 to 500 G 501 or more CALIFORNIA EMPLOYEES G 10 or less U 11 to 100 G 101 to 250 G 251 to 500 G 501 or more				
CERTIFIC	CATION				

I hereby certify that, to the best of my knowledge and belief, all information entered on the General Information, Company Information, Product Information and Ingredient Information Forms are complete and accurate.

Name: John Doe		Title: Manager, Product Compliance
Signature: X		Date Signed: April 30, 2001
FOR ARB USE ONLY	Company Code:	Total # of Pages Submitted:

FORM II

•	•	• •			
Prod	uct	Inf	orr	nat	ion

#	Product Name/Product #	Coating Type Code	Percent Hexavalent Chromium (wt. %)	Percent Cadmium (wt. %)	VOC Regulatory (g/l)	Coating Density (lb/gal)	2000 Calif. Sales (gallons)	Percent of 2000 Calif. Sales for Product Type	Price per Gallon (\$)	Dilution Ratio	Diluent	Other Dilution Ratio	Diluent
II-1	XYZ Acrtylic Enamel Product No. Asd123	6	12	0	250	8.53	60,000	60	153.60	1:1	Catalyst x		
II-2													
II-3													

COMMENTS	
Page of	Enter current page # out of the total pages submitted for FORM II. Photocopy this page as

necessary.

FORM III

Product Information for ALTERNATIVES to Coatings Containing Hexavalent Chromium and/or Cadmium

				_			ı			1	1	1
Entry #	Alternativ e to Form II Entry #	Product Name/ Product #	Coating Type Code	VOC Regulatory (g/l)	Coating Density (lb/gal)	2000 Calif. Sales (gallons)	Percent of 2000 Calif. Sales for Product type	Price per Gallon (\$)	Dilution Ratio	Diluent	Other Dilution Ratio	Diluent
III-1	II-1	XYZ Chrome-Free Acrylic Enamel	6	250	8.3	40,000	40	125.90	1:1	Catalyst X		
												<u> </u>
												>

COMMENTS	
Page of	Enter current page # out of the total pages submitted for FORM III. Photocopy this page as

necessary.

Page 21

FORM IV

Ingredient Information Table - Complete for each entry # in Form II

Entry # from Form II: II-1		List all ingredients (at least 1.0% of formulation by weight; Hexavalent Chromium and Cadmium at least 0.01% (or less if know)					
Ingredient #	Ingredient Name unknown)	(Trade name if ingredient name is	CAS#				
1	Hxavalent Cromiu	um	18540-29-9	12			
2	ethylbenzene		100-41-4	3			
3	xylene		1330-20-7	15			
4	Mineral Spirits		64742-88-7	47			
5	1,3,5-Trimethylbe	enzene	108-67-8	8			
6	VM7P Naptha		64742-89-8	9			
7	Carbon Black		1333-86-4	2			
8	n-Butyl Acetate		123-86-4	1			
9	Toluene		108-88-3	1			
	Aggregated VOC	s <1.0%	Various	1			
	Aggregated Exen	npt Compounds <1.0%	Various	1			
COMMENTS			WATER	0			
			ALL OTHER				
			TOTAL OF ALL INGREDIENTS (Must Equ	ual 100%) 100			

Page of	If the ingredient list for one entry from FORM II spans multiple pages enter current page # of the total. Photocopy this page a necessary.
---------	--

^{*} Wt. % is the weight %of the ingredient in the total weight of the product. List ingredients that amount to 1.0% or greater by weight of the product. Hexavalent Chromium and Cadmium at 0.01% (or less if known)

FORM V

Alternative Ingredient Information Table - Complete for each entry # in Form III

Entry # from Form III: III-1		List all ingredients (at least 1.0% of formulation by weight; Alternative ingredients at 0.1% (or less if known)					
Ingredient #	Ingredient Name unknown)	(Trade name if ingredient name is	CAS#	Wt. %*			
1	quinacridone Lon	acridone Red BR	1047-16-1	12.0			
2	ethylbenzene 100-41-4						
3	xylene		1330-20-7	15			
4	Mineral Spirits		64742-88-7	47			
5	1,3,5-Trimethylbe	enzene	108-67-8	8			
6	VM7P Naptha		64742-89-8	9			
7	Carbon Black		1333-86-4	2			
8	n-Butyl Acetate		123-86-4	1			
9	Toluene		108-88-3	1			
10							
	Aggregated VOC	s <1.0%	Various	1			
	Aggregated Exen	npt Compounds <1.0%	Various	0.7			
COMMENTS			WATER	0			
			ALL OTHER	0			
			TOTAL OF ALL INGREDIENTS (Must Equal 100%)	100			

* Wt. % is the weight %of the ingredient in the total weight of the product. List Alternative ingredients at 0.1% (or less if known) List other ingredients that amount to 1.0% or greater by weight of the product.

	, , , , , , , , , , , , , , , , , , , ,
Page of	If the ingredient list for one entry from FORM III spans multiple pages enter current page # of the total. Photocopy this page a necessary.